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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,201	02/14/2001	Seiji Umemoto	Q63077	9861

7590 08/09/2005

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EXAMINER

DUONG, TAI V

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,201

Applicant(s)

UMEMOTO ET AL.

Examiner

Tai Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/17/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Upon reconsideration, the finality of the rejection of the last Office action is withdrawn in view of the newly discovered references. Rejections based on the newly cited references follow.

Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 63-249126 (JP'126).

Note Fig. 1 and the Abstract which identically disclose the claimed backside substrate (2a or 2b) comprising a colored resin substrate which is formed of at least a mixture of a transparent resin and a colorant (a dye), and a transparent electrically conductive film (32a or 32b) on at least one side of the colored resin substrate wherein the backside substrate 2b is attached to a visual side substrate having an electrode 32a

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and a transparent resin 2a. Note the Abstract and page 2, lower left column, disclose that the resin substrate is dyeable, i.e. dye can be added to the transparent resin.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 63-249126 (JP'126) in view of Fukuchi et al (US 5,645,901) of record.

As to claim 3, the only difference between the colored resin substrates of the JP'126 and that of the instant claim is the substrate not being thicker than 1 mm. Fukuchi et al disclose that it was known to employ a resin substrate not being thicker than 1 mm (col. 10, lines 23-30). Thus, it would have been obvious to a person of ordinary skill in the art in view of Fukuchi et al to employ the colored resin substrate of the JP'126 not being thicker than 1 mm for obtaining a substrate with good mechanical characteristics and lightweight.

As to claim 5, the only difference between the colored resin substrates of the JP'126 and that of the instant claim is the substrate having a glass transition temperature of not lower than 90 °C. Fukuchi et al disclose that it was known to employ a resin substrate having a glass transition of not lower than 90 °C for providing sufficient heat resistance during the required working process (col. 2, lines 49-59). Thus, it would have been obvious to a person of ordinary skill in the art in view of Fukuchi et al to

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employ the colored resin substrate of the JP'126 having a glass transition of not lower than 90 °C for providing sufficient heat resistance during the required working process, thereby preventing damages to the resin substrate during the fabrication process of the liquid crystal display (LCD) device.

Claims 1, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Fig. 2 (APA Fig. 2) in view of JP 63-249126 (JP'126) and Ono (US 6,335,774).

The only difference between the LCD device of APA Fig. 2 and that of the instant claims is the backside substrate constituted by a colored resin substrate, instead of the backside substrate having a non-colored substrate in combination with the colored or light absorption layer 4 (specification, page 1, line 17 to page 2, line 4). The JP'126 discloses that it was known to employ a colored resin substrate which is formed of at least a mixture of a transparent resin and a colorant (a dye). Ono discloses that it was known to employ a colored substrate, instead of a non-colored substrate with a color filter, and flexible material (instead of glass substrate) for achieving low-profiling and weight-reduction of the LCD device (col. 8, lines 17-28). Thus, it would have been obvious to a person of ordinary skill in the art in view of the JP'126 and Ono to employ a backside substrate constituted by a colored resin substrate (instead of the backside substrate having a non-colored substrate in combination with the colored or light absorption layer) as the back substrate in the LCD device of APA Fig. 2 for obtaining a LCD device with low profile and low weight.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 63-249126 (JP'126) in view of Applicant's Prior Art Fig. 2 (APA Fig. 2).


The only difference between the colored resin substrates of the JP'126 and that of the instant claim is the colored resin substrate being black. APA Fig. 2 discloses that it was known to employ the combined back substrate being black (the substrate 2 in combination with the black printed layer 42) for improving contrast of display light in a reflection type LCD device (specification, page 1, line 17 to page 2, line 4). Thus, , it would have been obvious to a person of ordinary skill in the art in view of APA Fig. 2 to employ the colored resin substrate of the JP'126 as a black back side substrate in a reflection type LCD device for improving contrast of display light and at the same time reducing the profile and weight of the LCD device.

Applicant's arguments, see pages 9-12 of the appeal brief, filed 04/06/05, with respect to the rejections of claims 1-5, 7 and 8 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, new grounds of rejection are made in view of JP 3-249126, Ono and APA Fig. 2.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

TD
08/05


DUNG T. NGUYEN
PRIMARY EXAMINER